EXPERIMENT - 27

Object Oriented Programming Lab

Aim

Write a program to perform the deletion of white spaces such as horizontal tab, vertical tab, space, line feed, new line and carriage return from a text file and store the contents of the file without the white spaces on another file.

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Aim:

Write a program to perform the deletion of white spaces such as horizontal tab, vertical tab, space, line feed, new line and carriage return from a text file and store the contents of the file without the white spaces on another file.

Source Code:

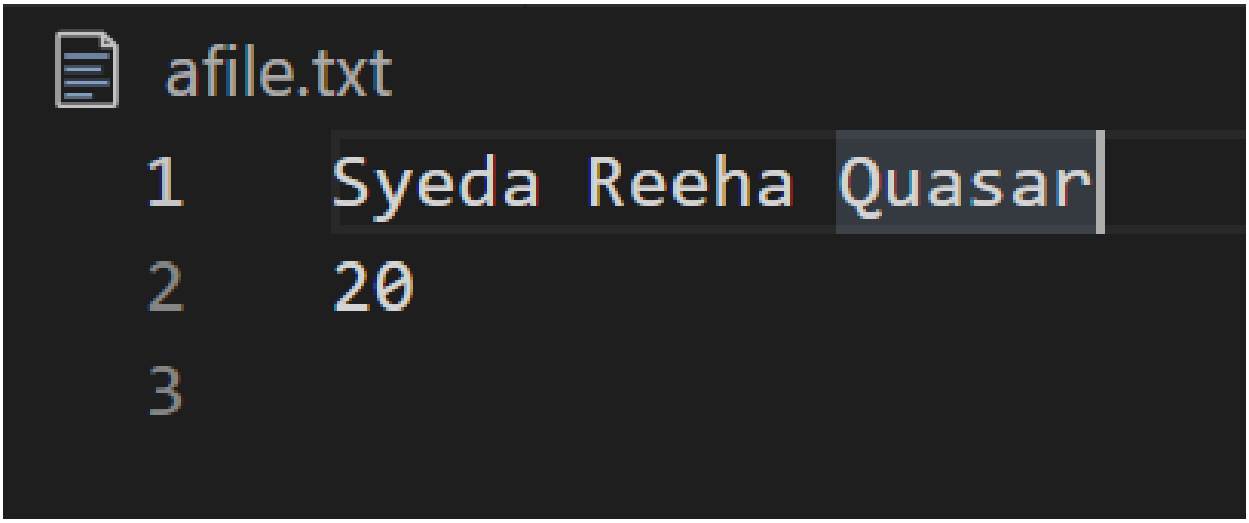
```
#include <fstream>
#include <iostream>
using namespace std;

int main()
{
    char data[100];

    // open a file in write mode.
    ofstream outfile;
    outfile.open("afile.txt");

    cout << "Writing to the file" << endl;
    cout << "Enter your name: ";
    cin.getline(data, 100);

    // write inputted data into the file.
    outfile << data << endl;

    cout << "Enter your age: ";
    cin >> data;
    cin.ignore();

    // again write inputted data into the file.
    outfile << data << endl;

    // close the opened file.
    outfile.close();
```

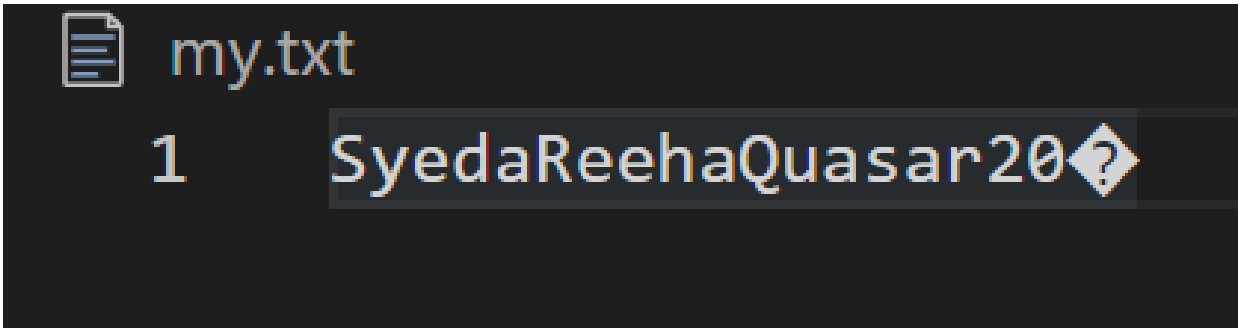
```
// open a file in read mode.
ifstream infile;
infile.open("afile.txt");

cout << "Reading from the file" << endl;
infile >> data;

// write the data at the screen.
cout << data;

infile >> data;
cout << data;

infile >> data;
cout << data << endl;

// again read the data from the file and display it.
infile >> data;
cout << data << endl;

// close the opened file.
infile.close();

char fname1[10], fname2[10];
char ch;

cout << "enter a file name to be copied ?\n";
cin >> fname1;

cout << "new file name ? \n";
cin >> fname2;

infile.open(fname1);

if (infile.fail())
{
    cerr << "No such a file exists \n";
    exit(1);
}
outfile.open(fname2);

if (outfile.fail())
{
    cerr <<"unable to create a file \n";
```

```
        exit(1);
    }

    while (!infile.eof())
    {
        ch = (char)infile.get();
        if (ch == ' ' || ch == '\t' || ch == '\n');
        else
            outfile.put(ch);
    }

    // close the opened file.
    infile.close();

    // close the opened file.
    outfile.close();

    return 0;
}
```

Output:

```
PS D:\sem 4\cpp\oops> cd "d:\sem 4\cpp\oops\" ; if ($?) { g++ filereadKeyboard.cpp -o filereadKeyboard } ; if (
$?) { .\filereadKeyboard }
Writing to the file
Enter your name: Syeda Reeha Quasar
Enter your age: 20
Reading from the file
SyedaReehaQuasar
20
enter a file name to be copied ?
afile.txt
new file name ?
my.txt
PS D:\sem 4\cpp\oops>
```





Viva Questions

Q1). What is file handling in C++?

Files store data permanently in a storage device. With file handling, the output from a program can be stored in a file. Various operations can be performed on the data while in the file.

A stream is an abstraction of a device where input/output operations are performed. You can represent a stream as either a destination or a source of characters of indefinite length.

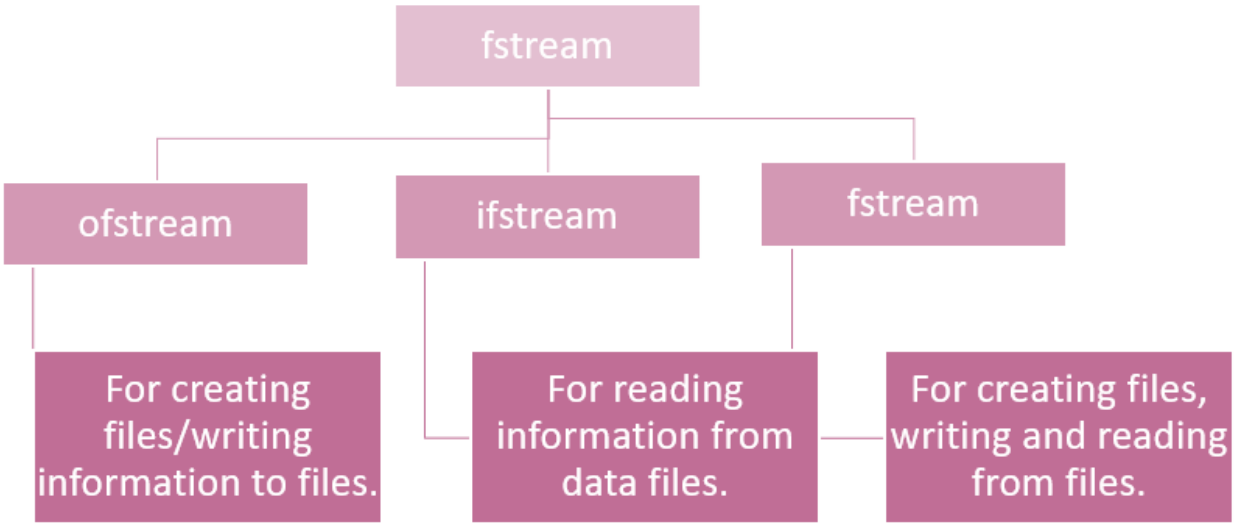
Q2). What is fstream Library?

Ans.

The fstream library provides C++ programmers with three classes for working with files. These classes include:

- **ofstream**- This class represents an output stream. It's used for creating files and writing information to files.
- **ifstream**- This class represents an input stream. It's used for reading information from data files.
- **fstream**- This class generally represents a file stream. It comes with ofstream/ifstream capabilities. This means it's capable of creating files, writing to files, reading from data files.

The following image makes it simple to understand:



fstream library

To use the above classes of the fstream library, you must include it in your program as a header file. Of course, you will use the #include preprocessor directive. You must also include the iostream header file.

Q3). What are benefits of file handing?

Ans.

- With file handling, the output of a program can be sent and stored in a file.
- A number of operations can then be applied to the data while in the file.
- A stream is an abstraction that represents a device where input/output operations are performed.
- A stream can be represented as either destination or source of characters of indefinite length.
- The fstream library provides C++ programmers with methods for file handling.
- To use the library, you must include it in your program using the #include preprocessor directive.